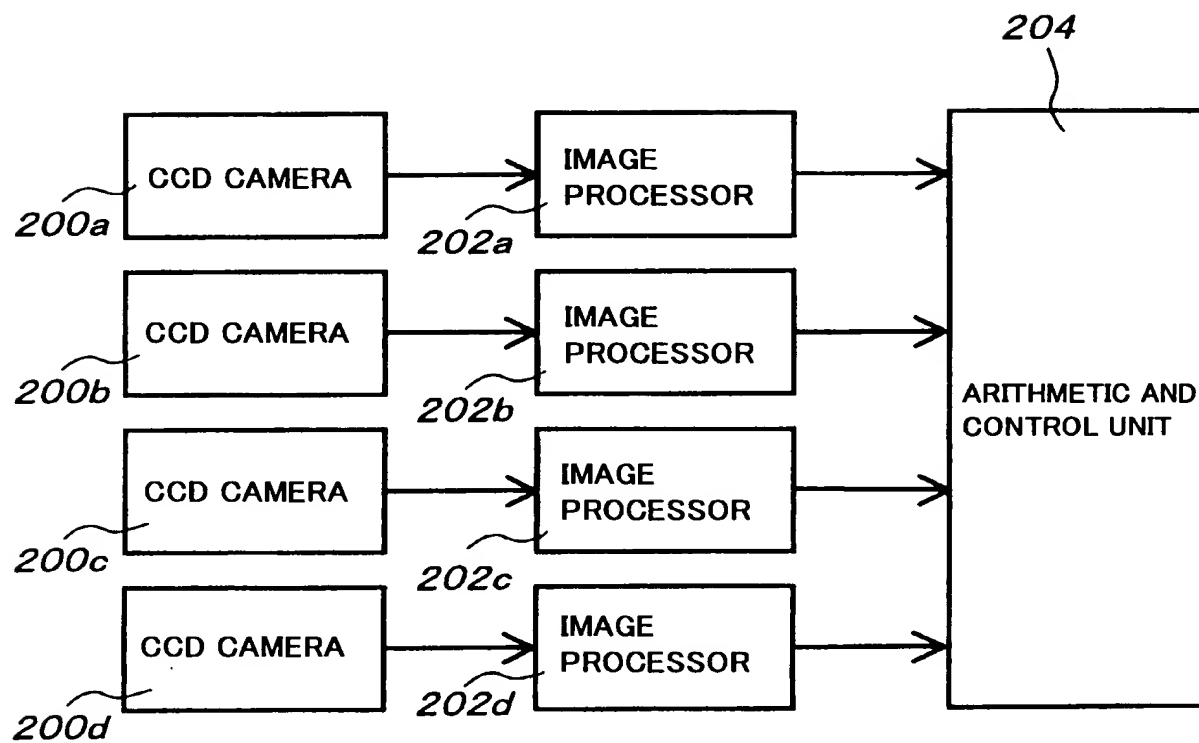
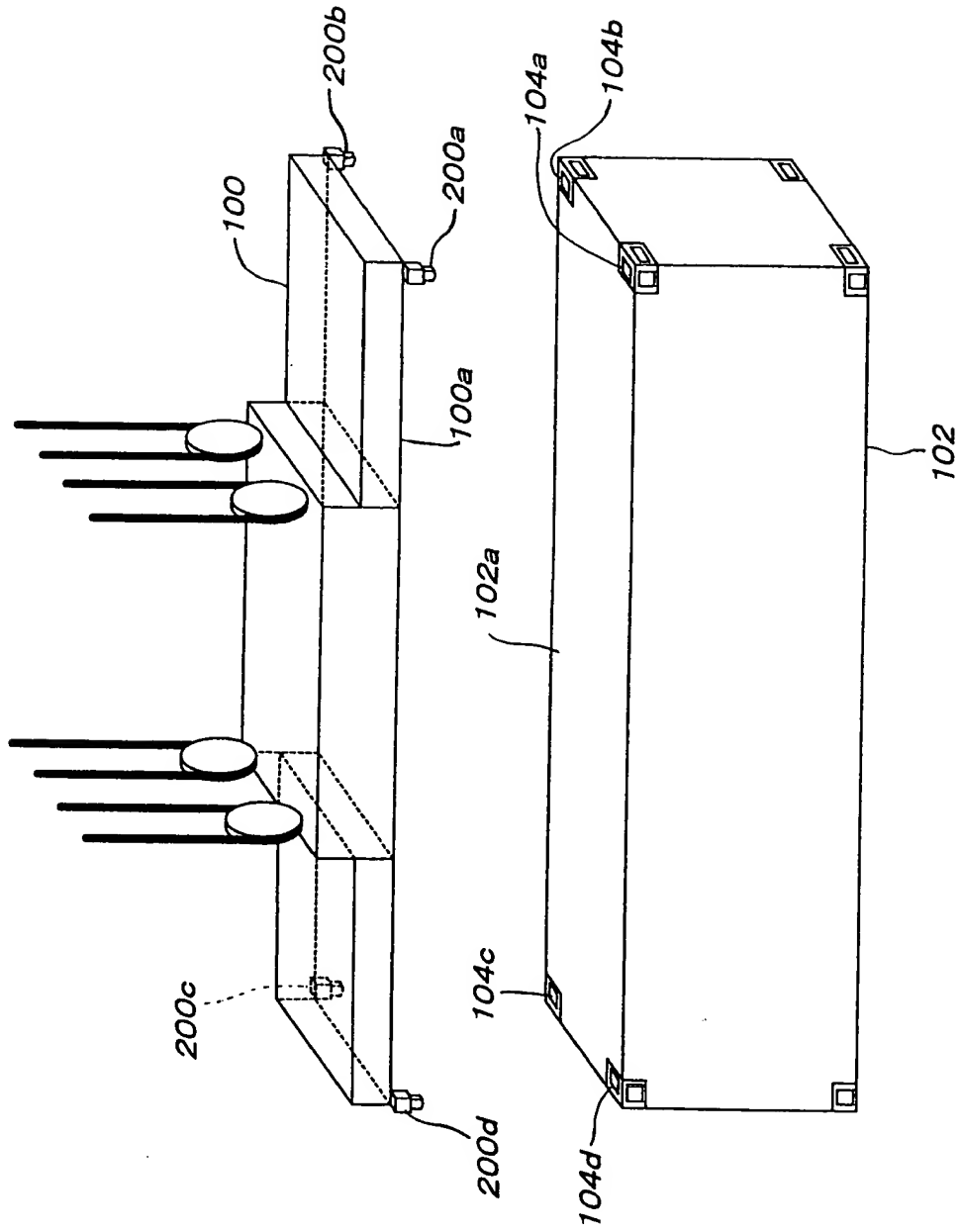


**FIG. 1**

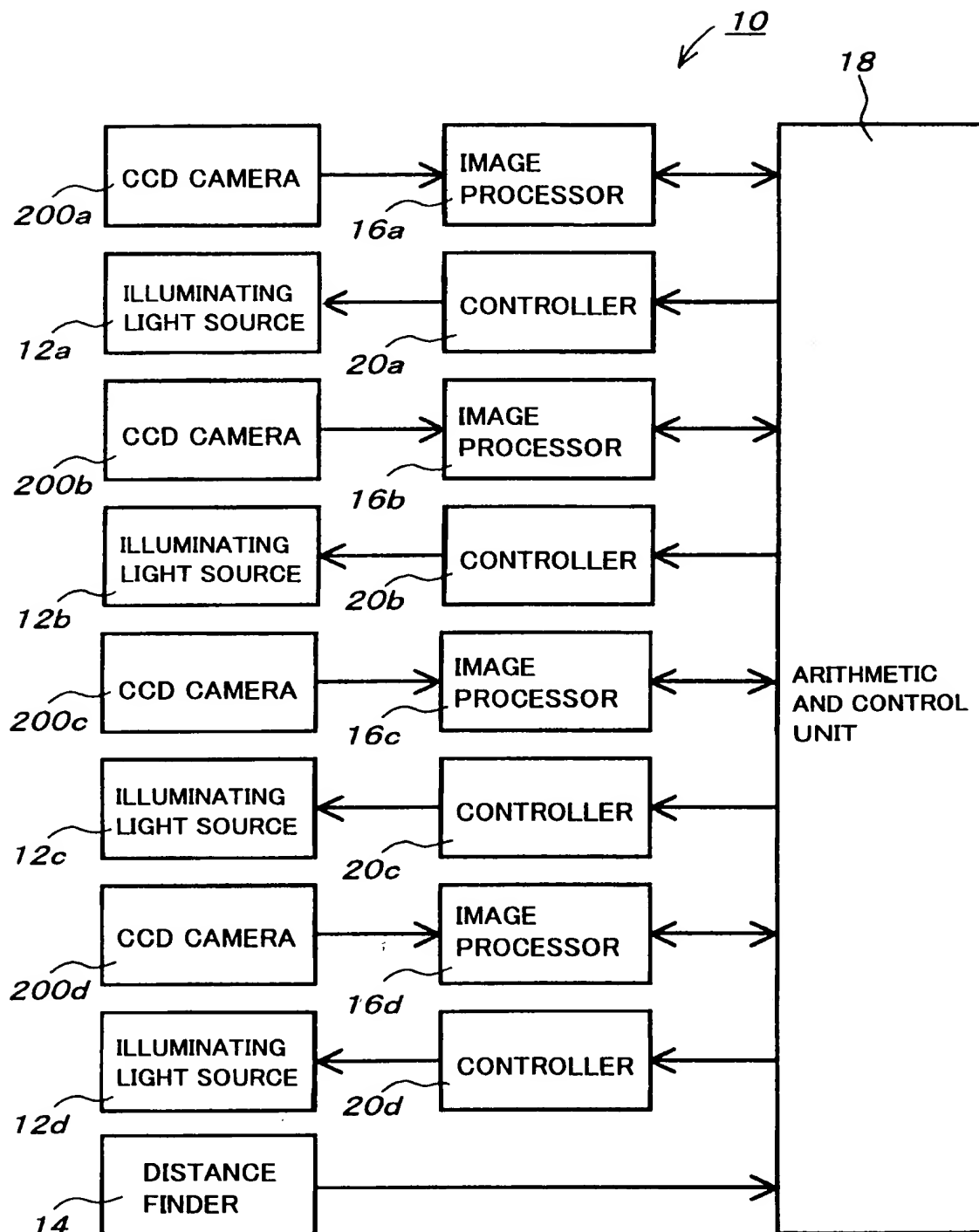


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FIG. 2

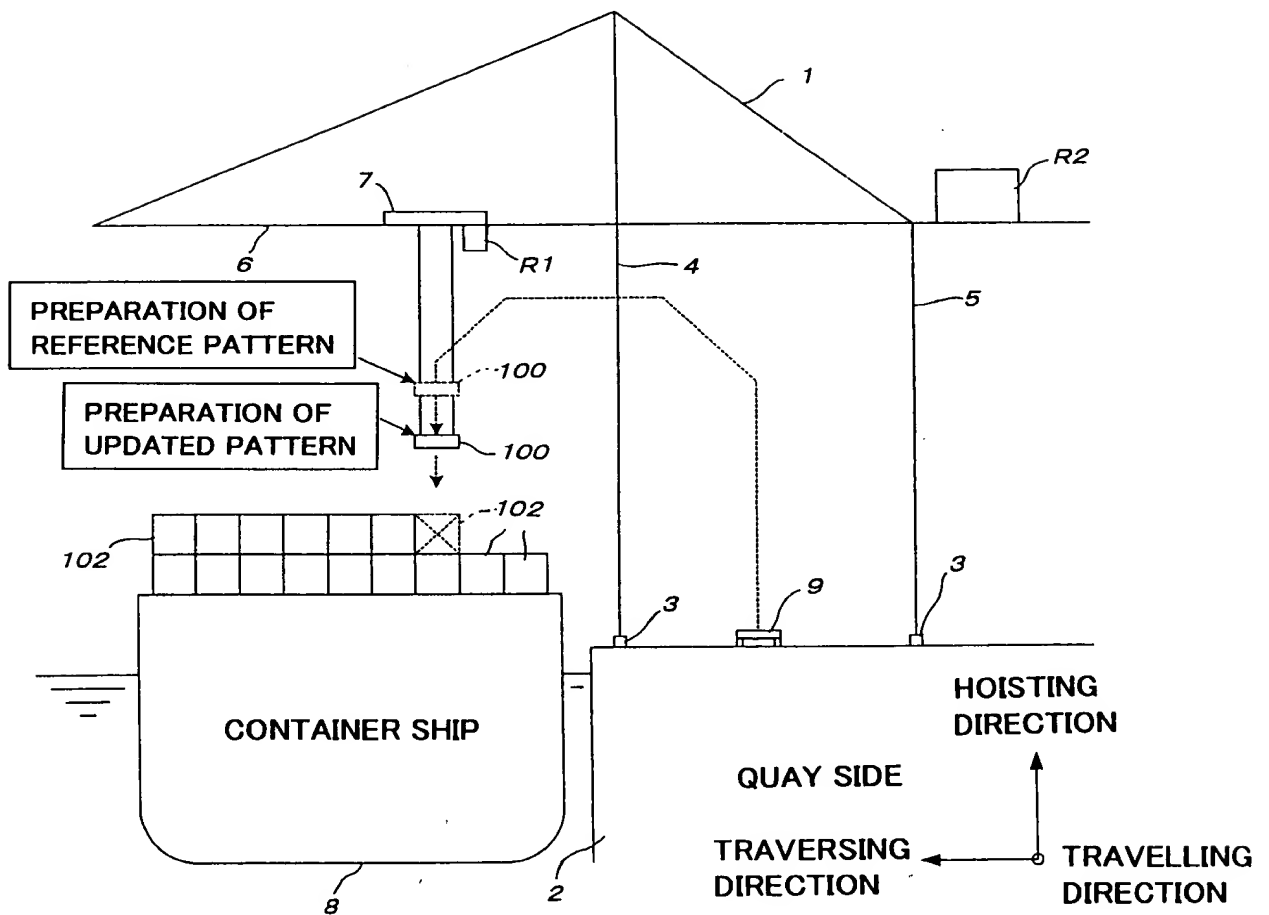


**FIG. 3**



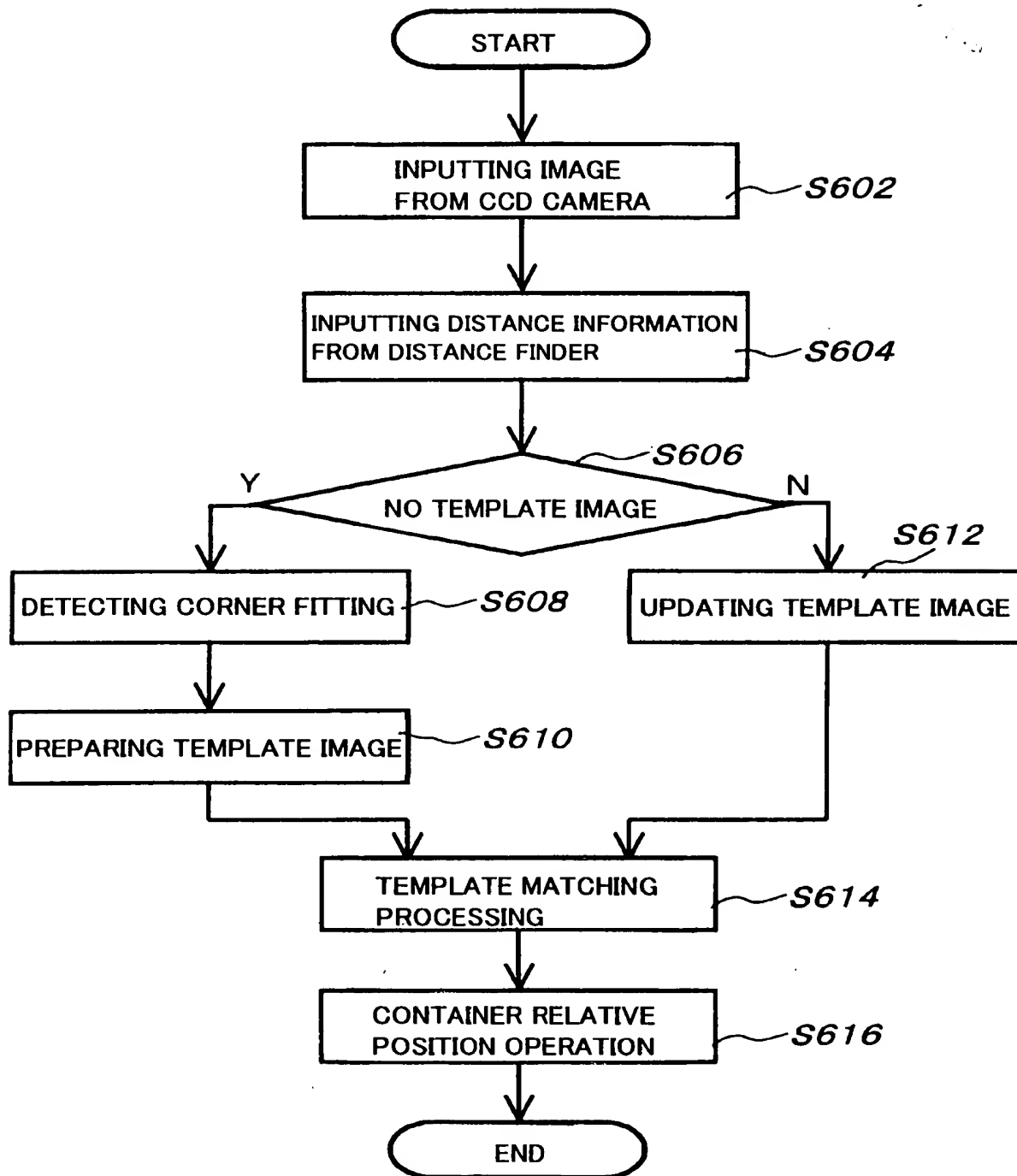


# FIG. 5



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**FIG. 6**



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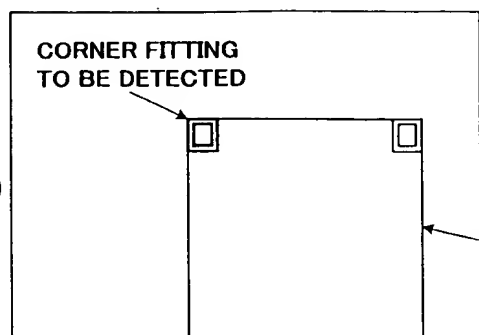


FIG. 7(a)

(a) ORIGINAL IMAGE

CONTAINER LOAD CARGO

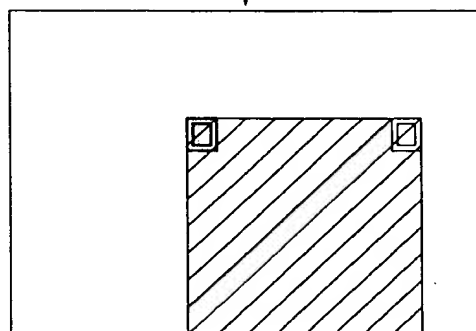


FIG. 7(b)

(b) DETECTION RESULT  
ON CONTAINER  
UPPER SURFACE

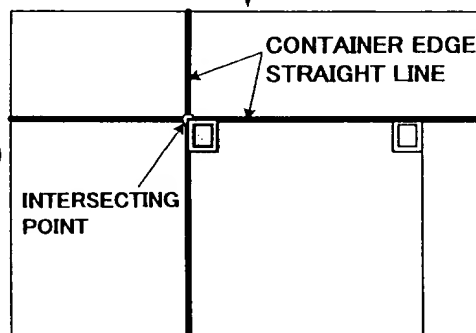


FIG. 7(c)

(c) RESULTS OF LINEAR  
APPROXIMATION OF  
CONTAINER EDGE AND  
INTERSECTING  
POINT DETECTION

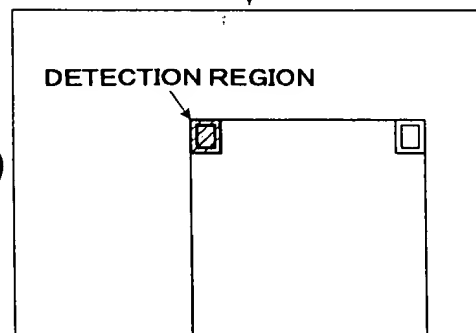


FIG. 7(d)

(d) RESULT OF CONTAINER  
FITTING DETECTION

STORAGE AS TEMPLATE IMAGE  
(REFERENCE PATTERN)

*FIG. 8*

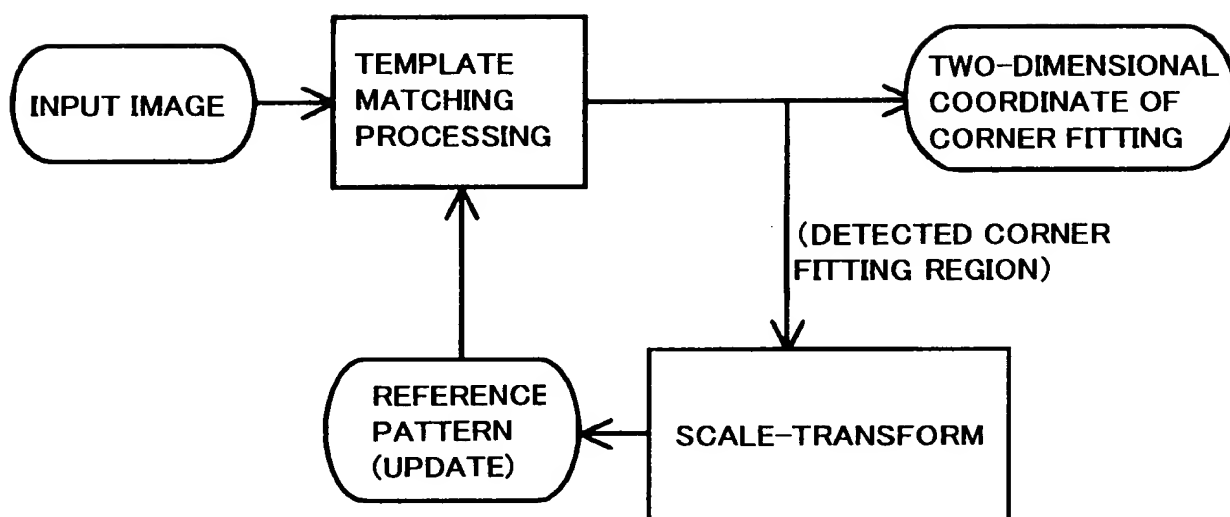
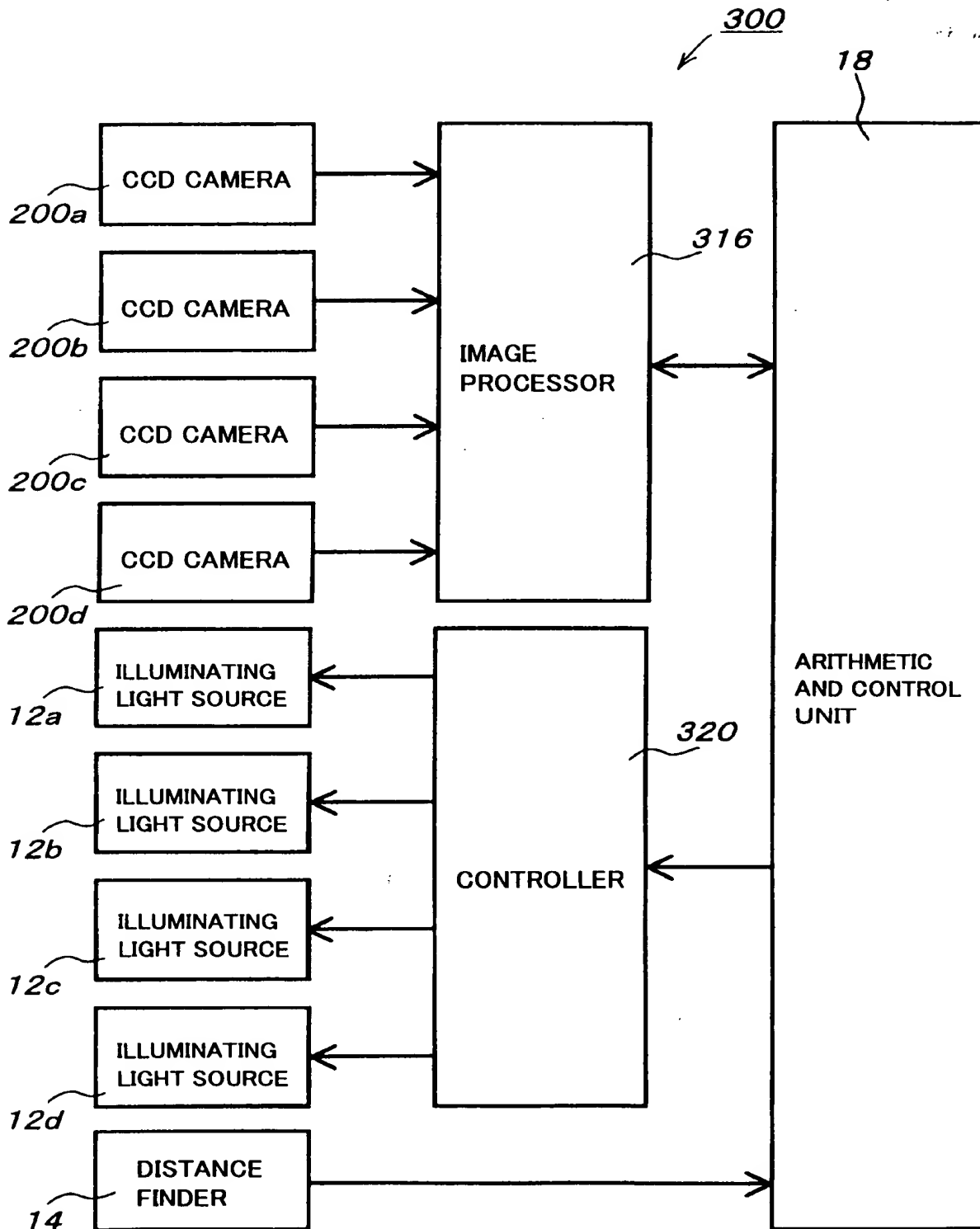




FIG. 9



*FIG. 10*

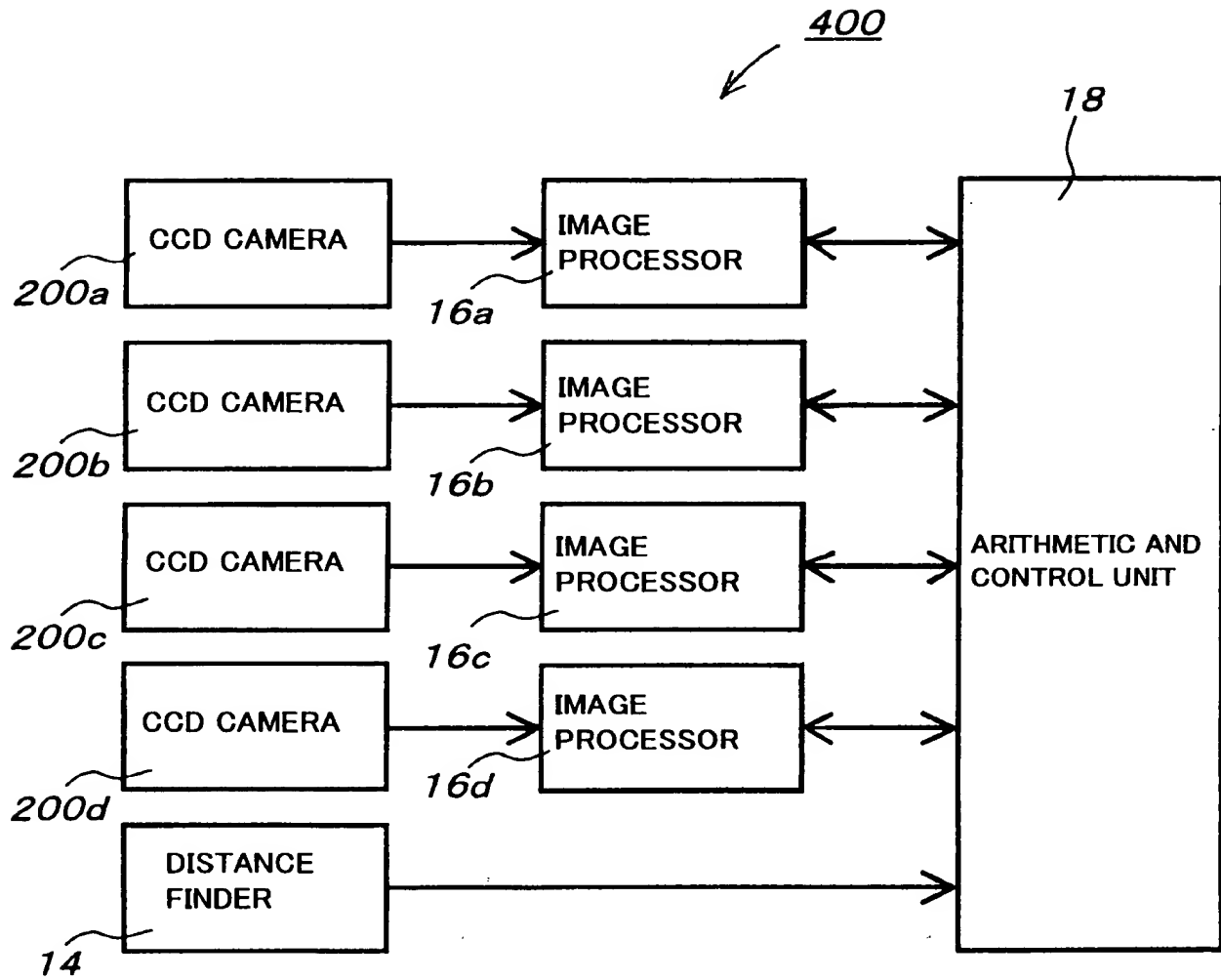
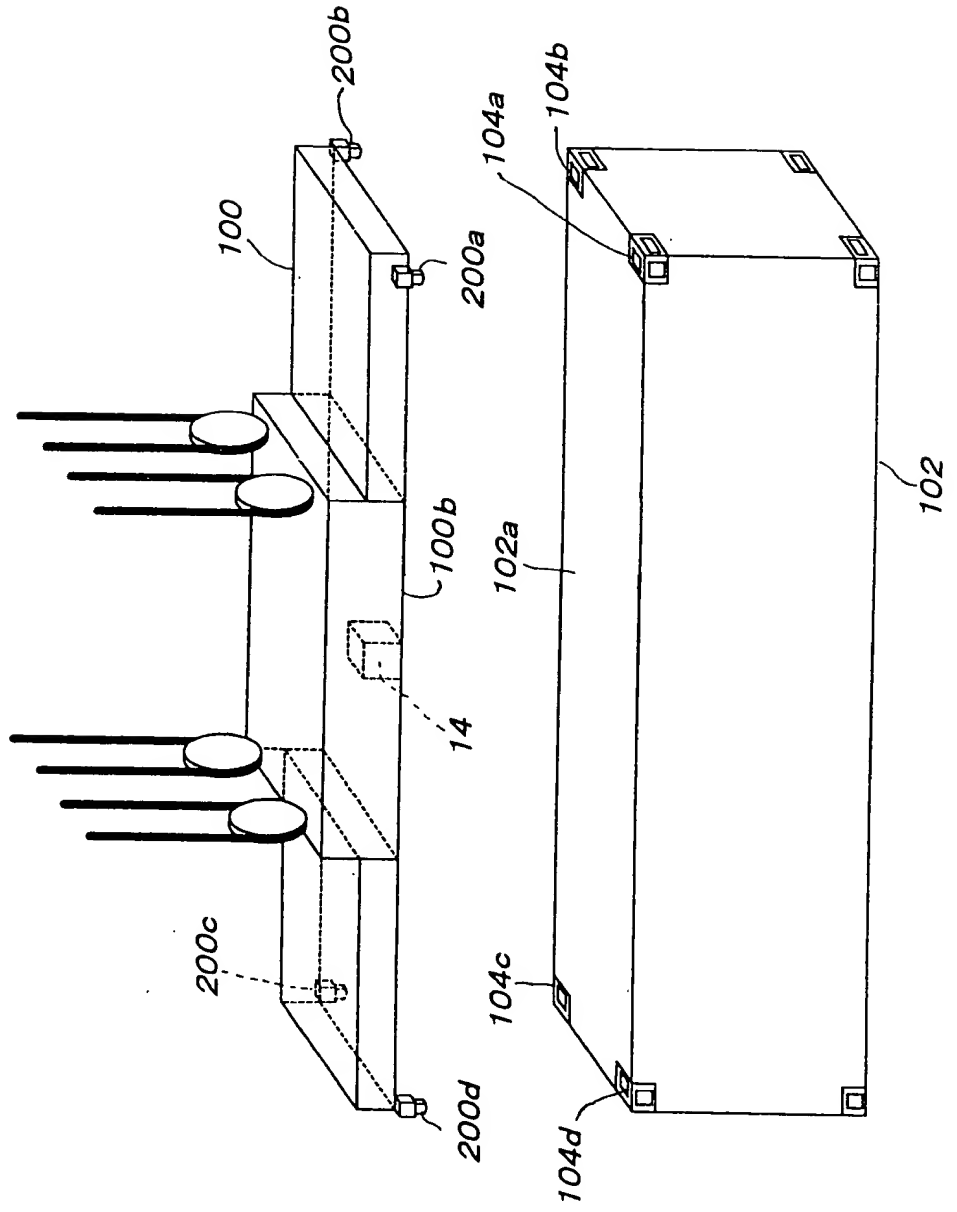
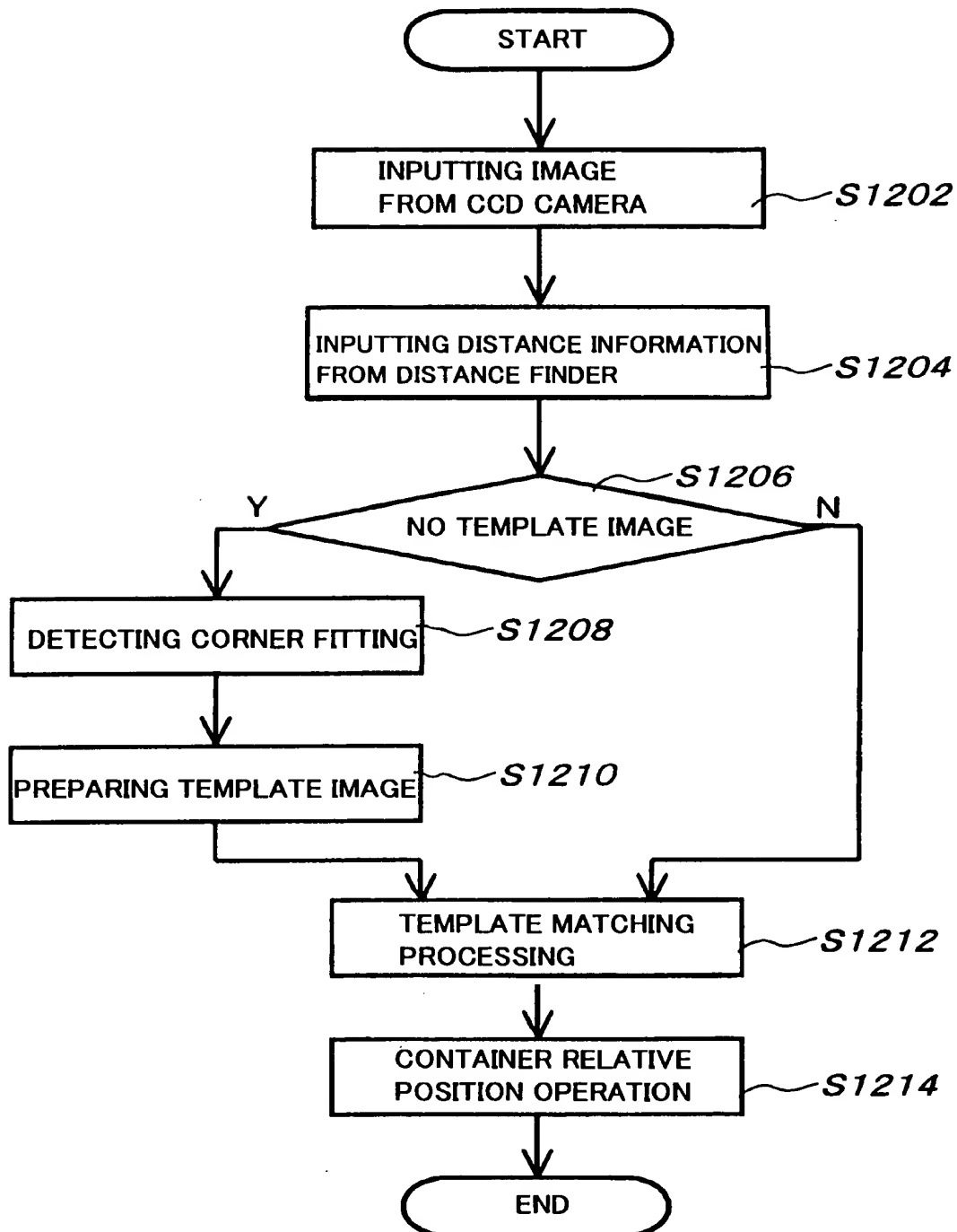


FIG. 11

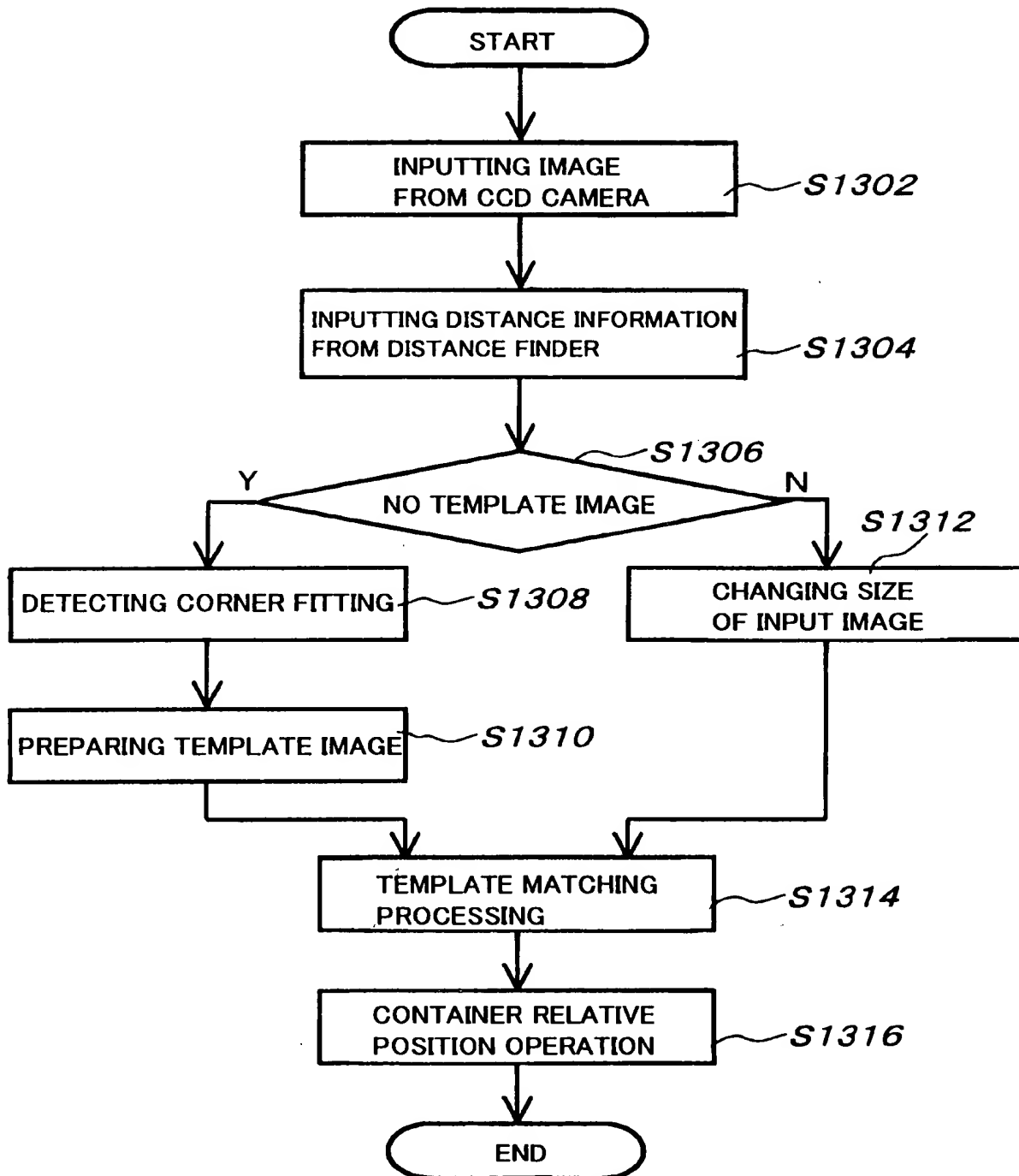


**FIG. 12**



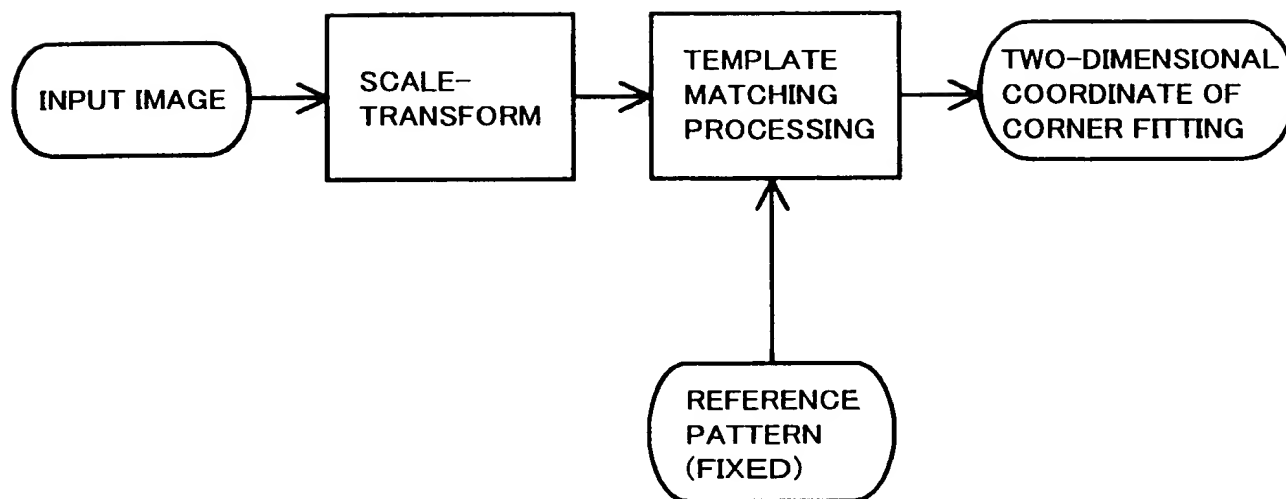
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**FIG. 13**



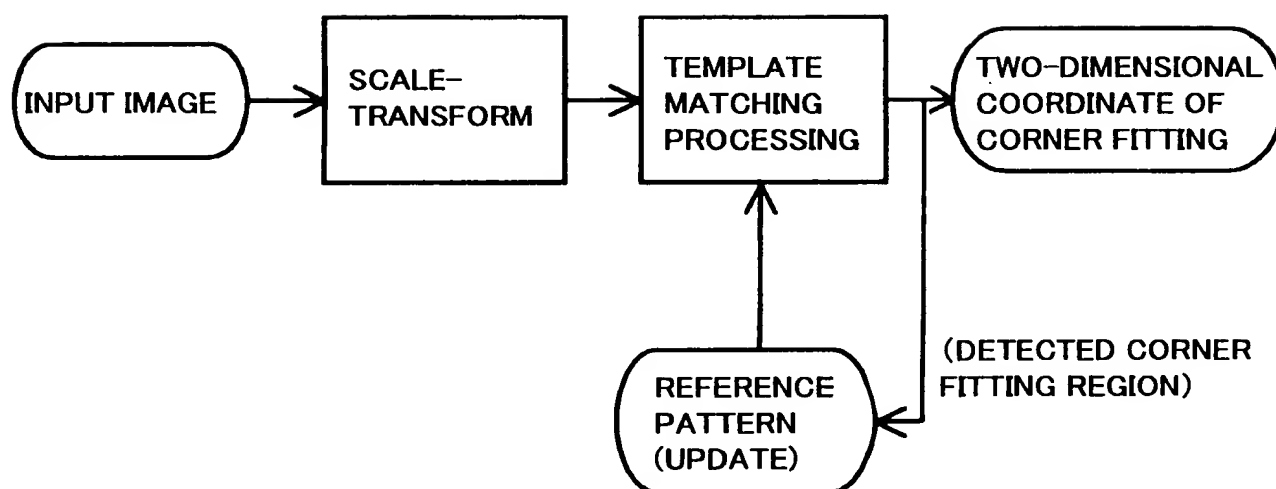
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*FIG. 14*



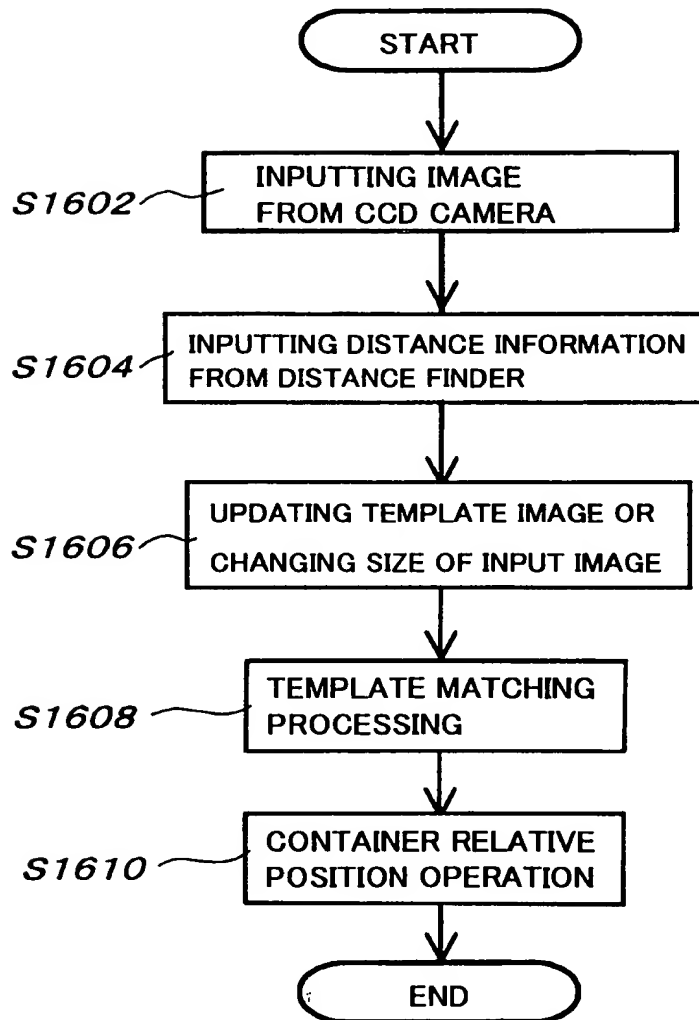
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**FIG. 15**



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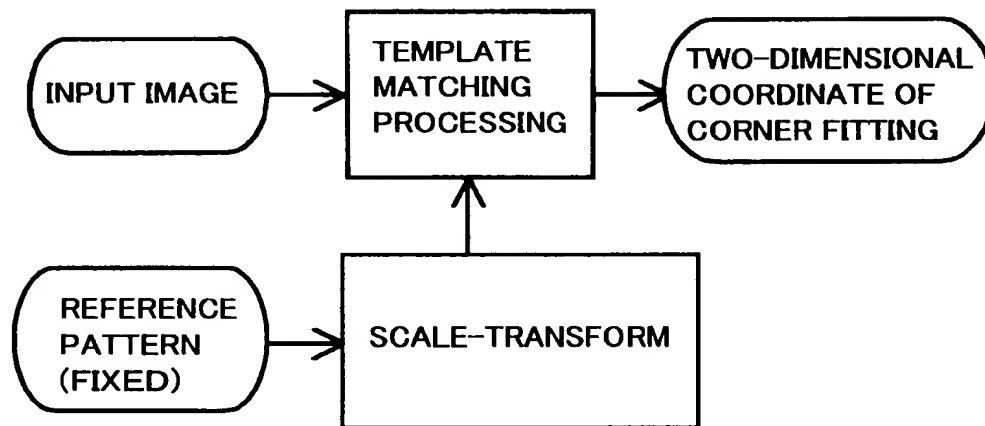
**FIG. 16**



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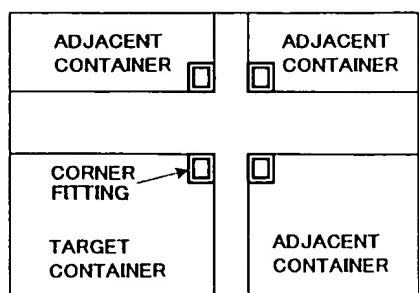


*FIG. 17*



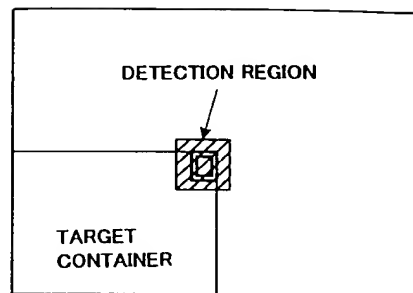
09011728-110501

FIG. 18(a)



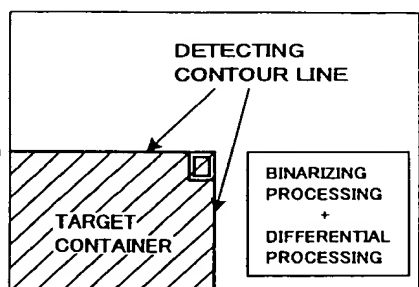
ORIGINAL IMAGE

FIG. 18(d)



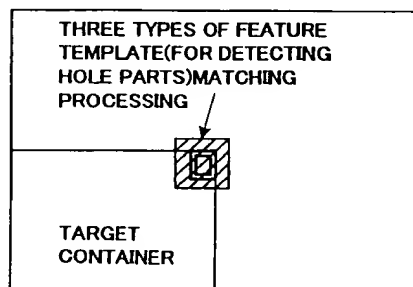
SETTING-UP OF  
DETECTION REGION

FIG. 18(b)



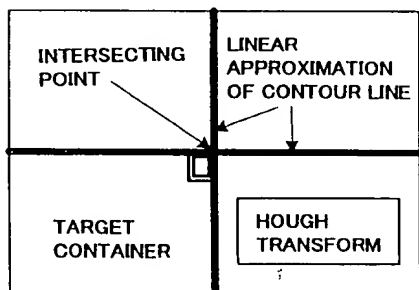
DETECTION RESULT ON  
CONTAINER UPPER SURFACE

FIG. 18(e)



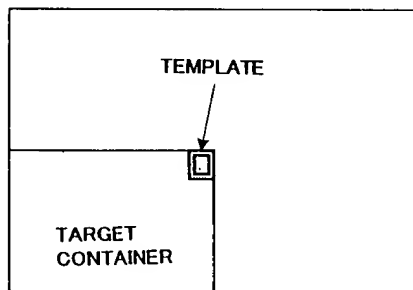
FEATURE TEMPLATE  
(FOR DETECTING HOLE PARTS)  
MATCHING PROCESSING

FIG. 18(c)



RESULTS OF LINEAR  
APPROXIMATION OF  
CONTOUR LINE AND  
INTERSECTING  
POINT DETECTION

FIG. 18(f)



RESULT OF TEMPLATE  
PREPARATION

FIG. 19(a)

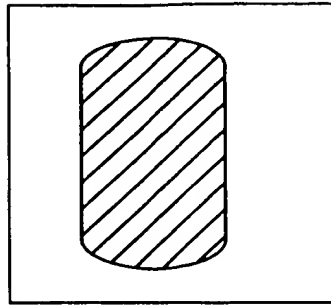
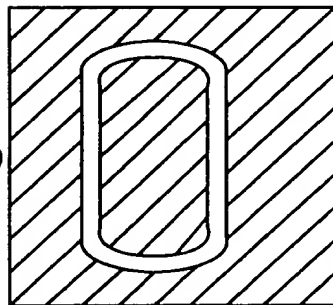


IMAGE DATA HAVING LOW  
CONCENTRATION IN HOLE PART

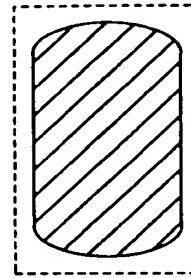


FIG. 19(b)



RESULT OF  
DIFFERENTIAL PROCESSING

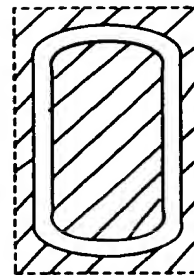
FIG. 19(c)



FEATURE TEMPLATE  
(FOR DETECTING HOLE PARTS)  
IMAGE 1



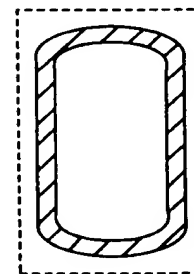
FIG. 19(d)



FEATURE TEMPLATE  
(FOR DETECTING HOLE PARTS)  
IMAGE 2

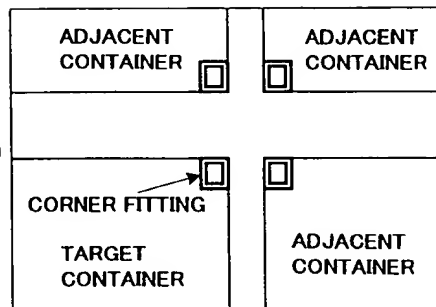


FIG. 19(e)



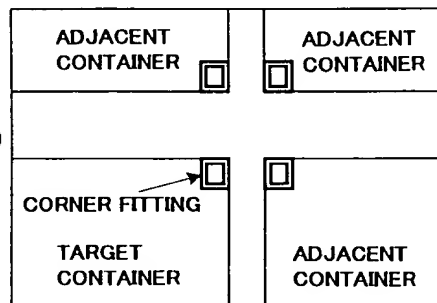
FEATURE TEMPLATE  
(FOR DETECTING HOLE PARTS)  
IMAGE 3

FIG. 20(a)



ORIGINAL IMAGE

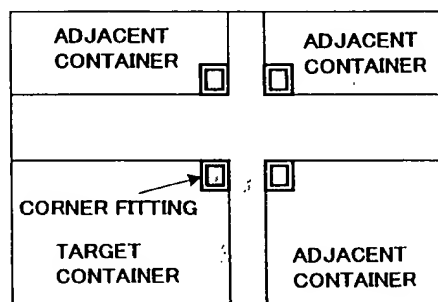
FIG. 20(b)



FEATURE TEMPLATE  
(FOR DETECTING HOLE PARTS)  
MATCHING PROCESSING

THREE TYPES OF FEATURE TEMPLATE  
(FOR DETECTING HOLE PARTS)  
MATCHING PROCESSING  
(WHOLE IMAGE DATA)

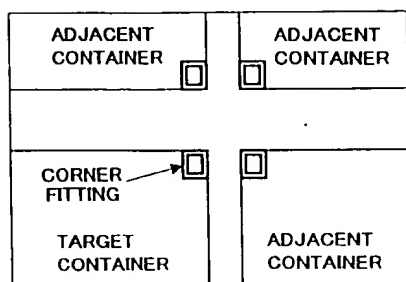
FIG. 20(c)



RESULT OF TEMPLATE  
PREPARATION

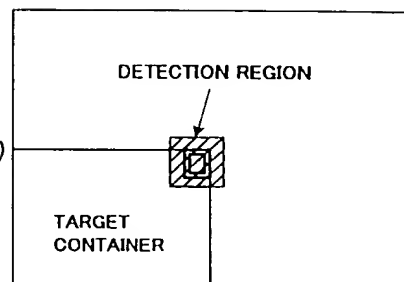
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FIG. 21(a)



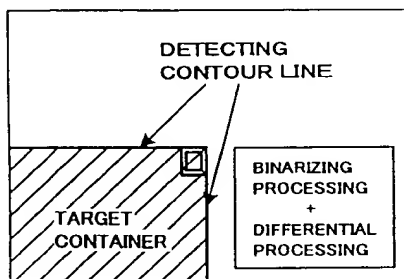
ORIGINAL IMAGE

FIG. 21(d)



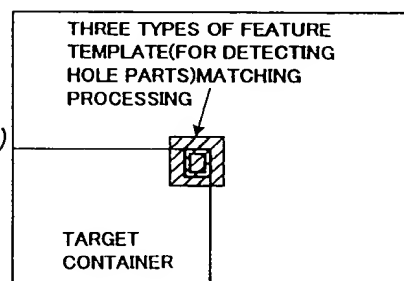
SETTING-UP OF  
DETECTION REGION

FIG. 21(b)



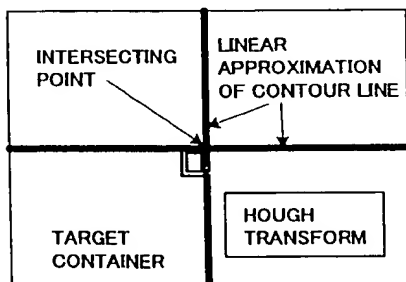
DETECTION RESULT ON  
CONTAINER UPPER SURFACE

FIG. 21(e)



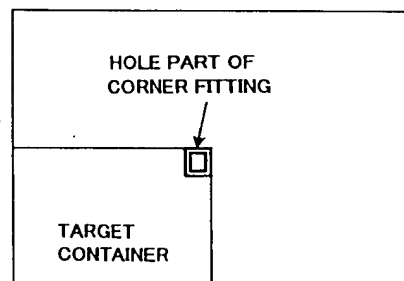
FEATURE TEMPLATE  
(FOR DETECTING HOLE PARTS)  
MATCHING PROCESSING

FIG. 21(c)



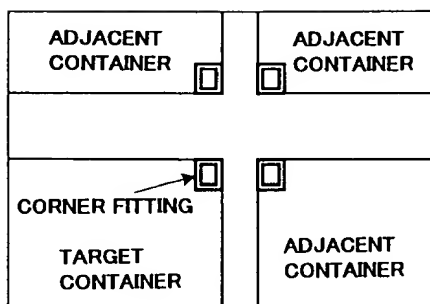
RESULTS OF LINEAR  
APPROXIMATION OF  
CONTOUR LINE AND  
INTERSECTING  
POINT DETECTION

FIG. 21(f)



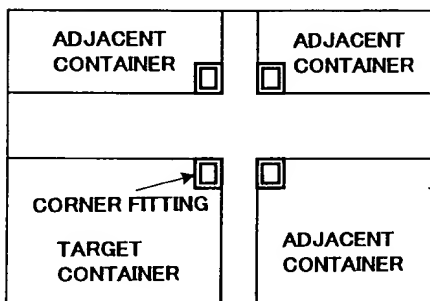
RESULT OF TEMPLATE  
PREPARATION

FIG. 22(a)



ORIGINAL IMAGE

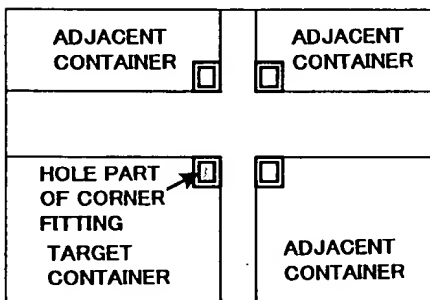
FIG. 22(b)



FEATURE TEMPLATE  
(FOR DETECTING HOLE PARTS)  
MATCHING PROCESSING

THREE TYPES OF FEATURE TEMPLATE  
(FOR DETECTING HOLE PARTS)  
MATCHING PROCESSING  
(WHOLE IMAGE DATA)

FIG. 22(c)



RESULT OF TEMPLATE  
PREPARATION